ECE322L -Homework 9 (100 points)
Assigned on Thursday, 04/09/2020-11 am
Due on Thursday, 04/23/2020-11 am

Consider the circuit below. The transistor parameters are: β=120, $V_{BE(on)}$=0.7 V, V_A=∞. The circuit parameters are V_{CC}=V_{EE}=3.3 V, R_S=500 Ω, R_L= 6 kΩ, R_B=100 kΩ, R_E=12 kΩ, R_C=12 kΩ.

(a) Calculate the average power dissipated in the transistor and R_C, for v_s=0.

(b) Determine the maximum undistorted signal power that can be delivered to R_L, and the resulting average power dissipated in the transistor and R_C.